5

10

15

20

25

feedback-control the position and the posture (the direction of image capture) of the TV camera 20A.

The commodity position database 14A corresponds to the above-mentioned database 14. The database previously stores commodity information about a correlation between an individual object commodity (e.g., the commodity name) and the position information about the position of the individual object commodity. The commodity position database 14A will be described in detail later with reference to FIG. 6.

The manipulator controller 15A and the motor driver 15a jointly serve to function as the manipulator controlling section 15 of FIG. 1. The manipulator controller 15A issues a driving instruction to a non-illustrated driving motor of the manipulator 30A via the motor driver 15a, and obtains information about a current position of the manipulator 30A to feedback-control operations of the manipulator 30A. This feedback control allows the manipulator 30A to manipulate (alter) the position and the posture of the object commodities.

The A/D converter 17A converts analog signals (image data) from the TV camera 20A to digital signals. The image memory 18A temporarily stores the digitalized image data, and the image compression device 19A that compresses the digitalized image

data, which is stored in the image memory 18A, as the taken images of the object commodities (a selling area) are transmitted to the clerk computer 10B, the inventory computers 50A and 50B, and the like.

5

10

15

The control of the position and the posture (the direction of image capture) of the TV camera 20Å in order to take an image of an individual object commodity, which control has been described with reference to FIG. 1, is realized by execution of predetermined software (program) by the control computer 10Å, and is performed by the camera controller 13Å. At that time, the camera controller 13Å reads, from the commodity position database 14Å, the positional information corresponding to an individual commodity contained in instructions issued from outside the control computer 10Å, and controls the TV camera 20Å based on the read position information, as described later with reference to

20

FTG. 6.

The clerk computer 10B serves to function as a communication controller 12B, a display 16B, and an image expansion device 19B, and is a personal computer equipped with a LAN board or the like. Each element of the clerk computer 10B is realized by execution of predetermined software (programs) on the personal computer. The communication controller 12B and the image expansion device 19B,

25

5

10

15

20

25

depicted as being external to the clerk computer 10B in FIG. 2, but are actually built in the clerk computer 10B. As an alternative, the clerk computer 10B may be a mobile information processing terminal, such as a mobile information terminal or a mobile telephone.

The communication controller 12B serves to function as at least the above-mentioned instruction receiver 12, and is communicably connected to the control computer 10A and the inventory computers 50A and 50B via the LAN 40 or the telephone line 60. The communication controller 12B receives an image of a selling area from the control computer 10A, and also receives instructions (e.g., a request for support by a clerk at a selling area), a marked image and a result of counting of object commodities from the inventory computers 50A and 50B.

The image expansion device 19B expands compressed images that have been received from the control computer 10A and the inventory computers 50A and 50B.

The display 16B serves to function as at least the above-mentioned in-shop display 16, and displays an image of a selling area which image has been received from the control computer 10A and instructions, a marked image and a result of counting of object commodities from the inventory computers